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(54) Title: METHOD OF INDUCING MEMORY B CELL DEVELOPMENT AND TERMINAL DIFFERENTIATION

(57) Abstract: A method is disclosed herein for inducing differentiation of a B cell progenitor into a memory B cells and/or a plasma cell. The method includes contacting a population of cells including a mature B cell or a B cell progenitor with an effective amount of IL-21, and isolating memory B cells or plasma cells. In one embodiment, the B cell progenitor is an immature B cell. A method is also disclosed for enhancing an immune response. The method includes contacting a population of cells including a B cell progenitor with an effective amount of IL-21, and isolating memory B cells or plasma cells. The memory B cells and/or the plasma cell are then introduced into the subject to enhance the immune response. A method is also disclosed for treating a subject with a condition comprising a specific deficiency of at least one of memory B cells and plasma cells. A method is disclosed for identifying an agent with a physiological effect on one or more of a memory B cell and a plasma cell differentiation. A method is also disclosed for identifying agents that inhibit an activity of IL-21.